

**FACT SHEET FOR PERMIT MODIFICATION
BNSF RAILWAY
PARADISE TIE TREATING PLANT SITE
PARADISE, MONTANA**

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
August 2007**

OPPORTUNITY FOR PUBLIC INVOLVEMENT

***MDEQ Announces Proposed Modifications for Hazardous Waste Permit MTHWP-01-02
issued to BNSF Railway for the Former Tie Treating Plant, Paradise, Montana***

SITE INFORMATION LOCATION:

Plains Public Library
108 West Railroad
Plains, MT 59859

Montana Department of Environmental Quality
1520 East Sixth Street
Helena, MT 59620

SEND COMMENTS TO:

Ann Kron
Montana Department of Environmental Quality
Waste and Underground Tank Management Bureau
P.O. Box 200901
Helena, MT 59620-0901
Fax: (406) 444-1374
Phone: (406) 444-5824
E-mail: akron@mt.gov

The Montana Department of Environmental Quality (MDEQ) has prepared this fact sheet to describe proposed modifications to the hazardous waste permit issued to BNSF Railway Company (BNSF) for the former tie treating plant located in Paradise, Montana. This fact sheet describes the proposed changes to the permit as well as a brief history and current status of the site.

MDEQ is soliciting public comment on the proposed modifications of the BNSF hazardous waste permit (MTHWP-01-02) during a public comment period (August 15 through September 28, 2007). During the public comment period, any interested person may request a public hearing. A request for a public hearing must be in writing and must state the nature of the issues proposed to be raised in the hearing. If a hearing is held, the MDEQ will provide notice of the public hearing date at least 30 days prior to the hearing.

1.0 LOCATION AND CURRENT USE

The Paradise Site is located approximately three-quarters of a mile northwest of the town of Paradise and five miles south of the town of Plains. Paradise is the only population center within five miles. The site is south of Highway 200, on the northern bank of the Clark Fork River. The site is the location of a former creosote tie treating plant and is currently undergoing remediation of subsurface creosote contamination. Operations at the site are regulated under a Montana hazardous waste permit which provides permit conditions based on State and Federal hazardous waste regulations. Current remedial activities include an active Corrective Action Management Unit (CAMU) which includes a product recovery system and active land treatment unit (LTU), a closed surface impoundment, a closed waste pile unit, two storage tanks for creosote, and an alternate concentration limit for groundwater.

2.0 BACKGROUND

2.1 Operation

The Paradise Site was a creosote tie treating plant that operated from 1908 to 1982. Creosote was the only wood preservative known to have been used at the plant. Creosote is produced from coal tar and is a mixture of hundreds of compounds, primarily semi-volatile organic compounds. Polynuclear aromatic hydrocarbons (PAHs) are semi-volatile organic compounds that generally

account for 85 percent (by weight) of creosote.

Railroad ties were treated with creosote at elevated pressures and temperatures in the treatment building. Wastewater from the plant was discharged through a buried pipe into a surface impoundment located southwest of the plant site. The impoundment is a former channel of the Clark Fork River and was used during plant operations as a settling basin for recovery and reuse of creosote.

Freshly treated ties were transported to the drip track area west of the treatment building. The drip track area consisted of two parallel rows of narrow-gauge tracks and was approximately 1,000 feet in length and 60 feet wide. Freshly treated ties were allowed to drip onto the underlying track and soils. The depress track, south of the drip track, was used to bring in locomotives and cars to remove the treated ties.

2.2 Hazardous Waste Permits

The State of Montana issued a hazardous waste permit to BNSF in 1988 to allow storage of hazardous waste in an on-site waste pile unit, and to allow treatment of contaminated soil in an on-site land treatment unit. In addition, the Environmental Protection Agency (EPA) issued BNSF a permit under the Hazardous and Solid Waste Amendments to RCRA which requires hazardous waste permitted facilities to conduct facility-wide corrective action. The EPA permit required that BNSF conduct remedial investigation and cleanup of contaminated areas throughout the facility. In 2000, MDEQ obtained oversight for facility-wide corrective action from EPA. Hazardous waste permits (both state and federal) are issued for a ten-year period and may be renewed at the end of that period.

The BNSF hazardous waste permit was reissued by MDEQ in 2001 and includes requirements for the operation of a CAMU which consists of a product recovery system and the land treatment unit; continued maintenance of the closed surface impoundment and waste pile; and facility-wide corrective action. In 2006, the Permit was modified to include requirements for an Alternate Concentration Limit (ACL) for groundwater, to include land use controls that restrict the use of groundwater, and to permit two storage tanks that hold creosote product pumped from the

subsurface.

Five years after permit issuance/re-issuance, the MDEQ is directed to review the permit to ensure the permit conditions are accurate and up-to-date. During the five year review, MDEQ determined there were a number of changes and updates that must be made to the permit. The permit modifications proposed in this document are based on the five year review of the permit.

3.0 PROPOSED PERMIT MODIFICATIONS

- For the portion of the surface impoundment located on the Southeast ¼ of Section 18, Township 19 North, Range 25 West, Sanders County, the property has changed ownership. The Permit has been modified to reflect the new owners; the new owners must fulfill permit requirements for that portion of the surface impoundment.
- Certificate of Survey (COS) 2462 is an update to COS 1007 and has been added to Attachment II.2 in the Permit.
- Due to the remote location of the site, timeframe requirements for remedying any equipment malfunctions was changed from allowing one week for repairs, to allowing BNSF provide a schedule to the Department for the remedy within one week.
- Requirements for completing lab analysis forms HPLC, GC/MS, and GC/PID when the facility changes laboratories has been removed. The Department has determined such reporting is not necessary for routine sampling and analysis; the data validation that is conducted during each analysis is sufficient.
- The Department has removed the restriction which states BNSF cannot place more than one inch of water per week to any uniform area of the Land Treatment Unit (LTU). The Department also requires BNSF maintain 0.3 bars of moisture on the LTU and there are often arid periods during the late summer months when more than one inch of water per week needs to be applied to maintain 0.3 bars of moisture.

- The Department has modified language requiring VOC/BTEX analysis to state BNSF may discontinue analyzing for those parameters upon written approval from the Department. This change in language allows BNSF to petition the Department for removal of these analyses without requiring another permit modification in the future. VOC/BTEX is not a common constituent of the creosote contaminating the groundwater at the site, but until BNSF provides sufficient justification for removal, VOC/BTEX analysis will continue to be required.
- The Department deleted the requirements that carbon replacement in the product recovery system must take place within five days after the Permittee receives treated groundwater analytical results which show exceedances of groundwater treatment standards set forth in the Permit. This was deleted because the carbon filter system at the site has been upgraded; the current vessels are designed to allow backwashing, which significantly extends the useful life of the carbon.
- Four attachments were updated to provide typographical clarifications and to update any minor procedural changes that have occurred in the past five years. The modified attachments are for Personnel Training, the Preparedness and Prevention Plan, the Contingency Plan, and the Waste Analysis Plan.
- Numerous typographical and formatting errors were corrected throughout the permit.
- Minor language changes were made to numerous permit conditions for clarification.

7.0 PUBLIC PARTICIPATION

MDEQ is seeking input from the community on the permit modifications described in this fact sheet. MDEQ has set a public comment period from August 15, 2007 through September 28, 2007, to encourage public participation in the permit modification process. During the public comment period, any interested person may request a public hearing. A request for a public hearing must be in writing and must state the nature of the issues proposed to be raised in the hearing. The MDEQ will provide notice of the public hearing date at least 30 days prior to the hearing.

MDEQ will prepare a Response to Comments after reviewing oral and written comments. MDEQ will then finalize the permit modification and EA and include both documents in the public record for the site.